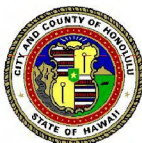


MUF HANNEMANN  
MAYOR

DEPARTMENT OF TRANSPORTATION SERVICES  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 3RD FLOOR  
HONOLULU, HAWAII 96813  
Phone: (808) 768-8305 • Fax: (808) 768-4730 • Internet: www.honolulu.gov



WAYNE Y. YOSHIOKA  
DIRECTOR

SHARON ANN THOM  
DEPUTY DIRECTOR

**Formatted:** Left: 1", Right: 1", Top: 0.5",  
Suppress Endnotes, Header distance from edge:  
1", Footer distance from edge: 1", Different  
first page header

**Formatted:** Not Hidden

May 21, 2010

RT10/09-336959

Mr. Frank Genadio  
92-1370 Kikaha Street  
Kapolei, Hawaii 96707

Dear Mr. Genadio:

Subject: Honolulu High-Capacity Transit Corridor Project  
Comments Received on the Draft Environmental Impact Statement

The U.S. Department of Transportation Federal Transit Administration (FTA) and the City and County of Honolulu Department of Transportation Services (DTS) issued a Draft Environmental Impact Statement (EIS) for the Honolulu High-Capacity Transit Corridor Project. This letter is in response to substantive comments received on the Draft EIS during the comment period, which concluded on February 6, 2009. The Final EIS identifies the Airport Alternative as the Project and is the focus of this document. The selection of the Airport Alternative as the Preferred Alternative was made by the City to comply with the National Environmental Policy Act (NEPA) regulations that state that the Final EIS shall identify the Preferred Alternative (23 CFR § 771.125 (a)(1)). This selection was based on consideration of the benefits of each alternative studied in the Draft EIS, public and agency comments on the Draft EIS, and City Council action under Resolution 08-261 identifying the Airport Alternative as the Project to be the focus of the Final EIS. The selection is described in Chapter 2 of the Final EIS. The Final EIS also includes additional information and analyses, as well as minor revisions to the Project that were made to address comments received from agencies and the public on the Draft EIS. The following paragraphs address comments regarding the above-referenced submittal:

As stated in Section 2.2.3 of this Final EIS, the NEPA Notice of Intent requested input on five transit technologies. A technical review process included the opportunity for public comment and was used in parallel with the alternatives analysis to select a transit technology. The process included a broad request for information that was publicized to the transit industry. Transit vehicle manufacturers submitted 12 responses covering all of the technologies listed in

**Comment [KMC1]:** Updated text with  
our standard response based on FTA  
comments

the Notice of Intent. An independent five-member technology panel composed of four transit experts and a transportation academic appointed by the City Council evaluated guided rubber-tire-on-concrete systems (e.g., Phileas bus system and VAL-type systems), monorail (which is a variation on rubber-tyred technology), steel-wheel-on-steel-rail systems, (e.g., light rail and rapid rail), and magnetic levitation (MAGLEV). The panel considered the performance, cost, and reliability of the proposed technologies.

Proprietary technologies, meaning those technologies that would have required all future purchases of vehicles or equipment to be from a single manufacturer, were eliminated because none of the proprietary technologies offered substantial proven performance, cost, and reliability benefits compared to steel wheel operating on steel rail.

The panel accepted public comment twice as part of its review. By a four-to-one vote, the panel chose a steel wheel vehicle operating on steel rail system because it was considered safe, reliable, economical, and non-proprietary. Those results are documented in the panel's report to the City Council dated February 22, 2008 entitled "Independent Technology Selection Panel Report".

In parallel with the alignment analysis, an independent five-member panel of transit experts and a transportation academic appointed by the City Council and the Mayor considered the performance, cost, and reliability of the five proposed technologies for the fixed guideway system. The panel twice considered and accepted and considered public comment as part of the review. By a four-to-one vote, the panel selected steel wheel operating on steel rail as the technology for the Project evaluated in the Final EIS. The four panel members selected steel-wheel technology because it is proven, safe, reliable, economical, and non-proprietary. Proprietary technologies, meaning those technologies that would have required all future purchases of vehicles or equipment to be from a single manufacturer, were eliminated because none of the proprietary technologies, including magnetic levitation, offered substantial proven performance, cost, and reliability benefits compared to steel wheel operating on steel rail. Selecting a proprietary technology also would have precluded a competitive bidding process, likely resulting in increased overall project costs.

Comment [k2]: And incorporated?

There is one operating urban magnetic levitation system in the world, and it has less than five years of operating record. The single operating system has a maximum speed of 100 kilometers per hour (62 miles per hour), which is similar to the maximum operating speeds of 50 to 60 miles per hour common for steel wheel systems. While the system is quieter, other systems may be designed to match the noise level of magnetic levitation when in operation. There are no specific safety improvements from the traction design. The assumed visual benefits for beam-track vehicles would not apply in the U.S. because of requirements to include an emergency egress walkway. In addition, the smaller structures proposed in the comment result in shorter span lengths, which increases the number of columns required and the percentage of views blocked by the support structure, which would result in higher costs.

In addition, the magnetic levitation system would not provide a net benefit or proven cost savings. To date, the High Speed Surface Transport system operators have declined to make operating expenses available. No comparative maglev project has ever been built within the U.S. Therefore, no data are available to support a cost estimate. With no comparative data



available to support an operating cost estimate, there are no means to verify this statement regarding maglev's operating and maintenance costs compared to a steel wheel system. The demonstrated operating speed of 100 kilometers per hour for urban magnetic levitation is similar to that of steel wheel systems.

The capital plan for the Project is presented in Section 6.3 of the Final EIS, which includes a description of the amount of funding anticipated from various sources. The capital plan takes the current economic downturn into account. Section 6.6 discusses the risks and uncertainties associated with the financial analysis prepared for the Project, including risks related to changes in project scope. If the Project is over budget, other sources of revenue have been identified in 6.3.3 and 6.6.3, which could include private funds (i.e., contributions toward the cost of building stations) or airport funds; however, \$1.3 billion in year-of-expenditure dollars is included in the project budget as contingency for just such eventualities.

In parallel with the alignment analysis, a five-member panel appointed by the City Council and the Mayor considered the performance, cost, and reliability of the five proposed technologies for the fixed guideway system. The panel twice accepted public comment as part of this review. By a four-to-one vote, the panel selected steel wheel operating on steel rail as the technology for the Project evaluated in the Final EIS. The four panel members selected steel wheel technology because it is mature, proven, safe, reliable, economical, and non-proprietary. Proprietary technologies, meaning those technologies that would have required all future purchases of vehicles or equipment to be from a single manufacturer, were eliminated because none of the proprietary technologies offered substantial proven performance, cost, and reliability benefits compared to steel wheel operating on steel rail. Selecting a proprietary technology also would have precluded a competitive bidding process, likely resulting in increased overall project costs.

There is a single operating urban magnetic levitation system in the world, in Japan, and having opened for operation in 2004, has only five years of operating record. The technology is unproven. The single operating system has a maximum speed of 100 kilometers per hour (62 miles per hour) which is similar to the maximum operating speeds of 50 to 60 miles per hour common for steel wheel systems. While the system is quieter, other systems may be designed to match the noise level of magnetic levitation when in operation. There is no specific safety improvement from the traction design. The assumed visual benefits for beam-track vehicles would not apply in the U.S. because of requirements to include an emergency egress walkway. Also, the smaller structures proposed in the comment result in shorter span-lengths, which increases the number of columns required and the percentage of view blocked by support structure, which would result in higher costs.

Magnetic levitation requires a different guideway design that would have different impacts from a steel-wheel system, as presented in the previous responses above discussion. The guideway design is being completed only for the technology that will be used for the Project.

Section 2.2.2 of the Draft EIS discusses the four alternatives evaluated as part of the Draft EIS and included a No Build Alternative and three Build Alternatives (Salt Lake Alternative, Airport Alternative, and the Airport and Salt Lake Alternative). Your preference for the Airport Alternative has been noted. While each of the alternatives includes trade-offs

**Comment [L3]:** See above - the accepted language was inserted to replace this section.



between benefits and impacts, the Airport Alternative from East Kapolei to Ala Moana Center has been selected as the Preferred Alternative.

*Your preference for the Airport Alternative has been noted. While each of the alternatives discussed in the Draft EIS includes trade-offs between benefits and impacts, the Airport Alternative from East Kapolei to Ala Moana has been identified as the Preferred Alternative as described above. Compared to the other alternatives discussed in the Draft EIS, the Airport Alternative will carry the most passengers, provide the greatest transit-user benefits, and result in the fewest vehicle hours of delay. It will provide access to employment centers at Pearl Harbor Naval Base and Honolulu International Airport and will serve the Salt Lake neighborhood with connecting bus service. Of the three Build Alternatives addressed in the Draft EIS, the Airport Alternative will have slightly lower impacts to the natural and built environment. During the public comment period on the Draft EIS, the public overwhelmingly supported the Airport Alternative. Of the comments that specifically supported one of the alternatives, more than 75 percent were in support of the Airport Alternative.*

*While each of the alternatives includes trade-offs between benefits and impacts, the Airport Alternative from East Kapolei to Ala Moana has been selected as the Preferred Alternative. The identification of the Airport Alternative as the Preferred Alternative was made by the City to comply with the FTA's NEPA regulations that state the Final EIS should identify the Preferred Alternative (23 CFR § 771.125 (a)(1)). Further, FTA's NEPA regulations for projects proposed to be funded with major capital investment funds, the level of detail necessarily increases between the Draft EIS and the Final EIS through preliminary engineering work (23 CFR 771.123 (j)). The identification of the Airport Alternative as the Preferred Alternative was made by the City to comply with the FTA's NEPA regulations that state the Final EIS should identify the Preferred Alternative (23 CFR § 771.125 (a)(1)) and need not evaluate alternatives rejected for good cause. This selection was based on consideration of the benefits of each alternative, public input on the Draft EIS, and City Council Resolution 08-261 identifying the Airport Alternative as the Project. Further, FTA's NEPA regulations for projects proposed to be funded with major capital investment funds, the level of detail necessarily increases between the Draft EIS and the Final EIS through preliminary engineering work (23 CFR 771 (j)).*

The selection of the Airport Alternative as the Project is described in Chapter 2 of this Final EIS. ~~The discussion of the alternatives considered is included in Chapter 2 of this Final EIS and the Alternatives Analysis.~~ Also, as discussed in Section 3.4.2 of this Final EIS, the Airport Alternative will carry the most passengers with 116,000 daily passengers and 282,500 daily trips in 2030, thereby resulting in the greatest transit-user benefits. Compared to the other alternatives considered, the Airport Alternative will also result in the fewest vehicle miles traveled and vehicle hours of delay, as well as provide access to major employment areas including Honolulu International Airport, ~~that and~~ will have substantially greater ridership than the other alternatives considered ~~in the Draft EIS.~~

23 CFR 771.111(f) states "The action evaluated in each EIS...shall not restrict consideration of alternatives for any other reasonable foreseeable transportation improvements". Future transit improvements, including an extension to the U.H. Manoa campus will not be precluded by the implementation of the Project.

**Comment [k4]:** Reg doesn't state this. Change reference or remove text.

**Comment [KMC5]:** Text revised

**Comment [k6]:** And? Sentence unclear.

Mr. Frank Genadio  
Page 5

As described above, steel wheel technology has been selected for the Project and proposed changes to the Final EIS that are not consistent with the selected technology, including removal of the figure showing guideway cross-section, have not been made. As previously explained, there is no available data to support the estimated costs included in the comment.

The FTA and DTS appreciate your interest in the Project. The Final EIS, a copy of which is included in the enclosed DVD, has been issued in conjunction with the distribution of this letter. Issuance of the Record of Decision under NEPA and acceptance of the Final EIS by the Governor of the State of Hawaii are the next anticipated actions.

Very truly yours,

WAYNE Y. YOSHIOKA  
Director

Enclosure